COMPLETE LISTING OF ALL CLAIMS IN THE APPLICATION

1-13. (canceled)

14. (currently amended) A polyalkene amine which is substantially free of halides and has the formula (I)

where

R₁, R₂, R₃ and R₄, independently of one another, are each hydrogen or an unsubstituted or substituted, saturated or mono- or polyunsaturated aliphatic radical having a number-average molecular weight of up to 40000, at least one of the radicals R₁ to R₄ having a number average molecular weight of from 150 to 40000, and R₅ and R₆, independently of one another, are each hydrogen, alkyl, cycloalkyl, hydroxyalkyl, aminoalkyl, alkenyl, alkynyl, aryl, arylalkyl, alkylaryl, hetaryl or an alkyleneimine radical of the formula (II)

$$\begin{bmatrix} -A1k - N \end{bmatrix}_{m}^{R_8}$$
 (II)

where

Alk is a straight-chain or branched alkylene,



m is an integer from 0 to 10, and

R₇ and R₈, independently of one another, are each hydrogen, alkyl, cycloalkyl, hydroxyalkyl, aminoalkyl, alkenyl, alkynyl, aryl, arylalkyl, alkylaryl or hetaryl or, together with the nitrogen atom to which they are bonded, form a heterocyclic structure,

or R_5 and R_6 , together with the nitrogen atom to which they are bonded, form a heterocyclic structure, it being possible for each of the radicals R_5 , R_6 , R_7 and R_8 to be substituted by further alkyl radicals carrying hydroxyl or amino groups.

- 15. (previously amended) A polyalkene amine as defined in claim 14, of the general formula (I), whose polyalkene portion is formed of C_2 - C_4 alkene monomers.
- 16. (previously amended) A polyalkene amine as defined in claim 15, wherein the $\rm C_2\text{-}C_4$ alkene is 1-butene or isobutene.
 - 17. (canceled)
- 18. (previously amended) A polyalkene amine as defined in claim 14, wherein the amine portion is derived from a nitrogen compound of formula (V)

$$H \longrightarrow \overline{N} \longrightarrow R_5$$
 (V

19. (previously amended) A polyalkene amine as defined in claim 18, wherein the nitrogen compound is selected from ammonia, ethylene-1,2-diamine, propylene-1,2-diamine, butylene diamines, the mono-, di- and trialkyl

derivatives of said amines, polyalkylene polyamines, the alkylene portions of which do not have more than 6 carbon atoms, the N-amino- C_1 - C_6 -alkyl piperazine.

20. (currently amended) A polyalkylene amine as defined in claim 19, which is derived from a polyalkene epoxide of the general formula (IV),

$$R_1 - C - C - R_3$$
 (IV)

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the polyalkene portion of which is formed of 1-butene or isobutene monomers and the amine portion of which is derived from ammonia.

- 21. (previously amended) A fuel composition containing at least a polyalkene amine defined in claim 14 in a concentration of about 20 to 5000 mg/kg of fuel as an additive for keeping the fuel intake system clean.
- 22. (previously amended) A lubricant composition containing as an additive at least one polyalkene amine as defined in claim 16 in a proportion of about 1 to 15% by weight, based on the total weight of the composition.
 - 23. (new) A polyalkene amine as defined in claim 14, where $R_{\rm 5} \ {\rm and} \ R_{\rm 6}, \ independently \ of \ one \ another, \ are \ each \ hydrogen, \ alkyl, \ cycloalkyl, \\ aminoalkyl, \ alkenyl, \ alkynyl, \ aryl, \ arylalkyl, \ alkylaryl, \ hetaryl \ or \ an \\ alkyleneimine \ radical \ of \ the \ formula \ (II)$

$$\begin{bmatrix} A1k - N \\ R_7 \end{bmatrix}_{m}^{R_8}$$
 (II)



where

Alk is a straight-chain or branched alkylene,

m is an integer from 0 to 10, and

R₇ and R₈, independently of one another, are each hydrogen, alkyl, cycloalkyl, hydroxyalkyl, aminoalkyl, alkenyl, alkynyl, aryl, arylalkyl, alkylaryl or hetaryl or, together with the nitrogen atom to which they are bonded, form a heterocyclic structure,

or R_5 and R_6 , together with the nitrogen atom to which they are bonded, form a heterocyclic structure, it being possible for each of the radicals R_5 , R_6 , R_7 and R_8 to be substituted by further alkyl radicals carrying amino groups.

24. (new) A polyalkene amine as defined in claim 14, where there is no hydroxyl group attached to a carbon atom which is adjacent to a carbon atom to which the $-NR_5R_6$ group is attached.

